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A Cross Sectional Study of Correlation between Personality Profile and Sociodemographic Profile in Patients with Opioid Use Disorder Attending Tertiary Care De-addiction Services in Teaching Institute of a Metropolitan City

*¹Faizee Faizaan, ²Dakshikar Sarika, ³Chavhan Ravindra and ⁴Gupta Archita

^{1,4}Junior Resident, Department of Psychiatry, Grant Government Medical College, Maharashtra University of Health Sciences, Maharashtra, India.

²Associate Professor, Department of Psychiatry, Grant Government Medical College, Maharashtra University of Health Sciences, Maharashtra, India.

³Senior Resident, Department of Psychiatry, Grant Government Medical College, Maharashtra University of Health Sciences, Maharashtra, India.

Abstract

Background: Substance use disorder (SUD) includes symptoms indicating continued substance use despite significant issues. In India, opioid use is prevalent in 2.1% of the population, with heroin being the most common (1.14%). Specific personality traits may predispose individuals to drug use disorders. The DSM-5 alternative model defines personality disorders using five pathological domains: Antagonism, Disinhibition, Negative Affectivity, Psychoticism, and Detachment. While previous research has shown that patients with heroin use disorders exhibit more impulsivity traits, few studies have examined the personality profile using the alternative model.

Objective: To study the correlation between personality profile and sociodemographic profile in patients with opioid use disorder (OUD).

Methodology: A cross-sectional study was conducted on 100 patients meeting DSM-5 criteria for OUD. The Personality Inventory for DSM-5 Brief Form (PID5BF) was used for personality assessment, and the Modified Kuppuswamy Scale (2022) for socioeconomic data. Analysis was done using SPSS 27.0. Descriptive data was calculated as means and standard deviations. The Chi-square test and ANOVA test was used to make comparisons between groups. A P value < 0.05 was considered significant.

Results and Discussion: The study population had a mean age of 32.77 years, predominantly male (99%). The mean duration of opioid use was 8.44 years, with an average age of first problematic use at 24.17 years. Disinhibition scored highest among personality domains (mean=1.15). Significant correlations included: age and Detachment, linked to unresolved developmental conflicts; education and Antagonism/Psychoticism, with higher education aiding increased problem recognition; unemployment and Disinhibition, affecting job performance; duration of use and Antagonism; primary support group issues and high Negative Affect/Disinhibition.

Conclusion: Sociodemographic factors like education, employment, and substance use patterns are significantly affected by dysfunctional personality domains, especially Disinhibition and Psychoticism. Recognizing these relationships can lead to better clinical outcomes through personality-informed assessment.

Keywords: Opioid Use Disorder, Alternative Personality Model, Disinhibition, Sociodemographic Factors.

Introduction

Substance use disorder is the diagnostic term for the prolonged use and abuse of a substance. ^[1] The essential feature of a substance use disorder (SUD) is a cluster of cognitive, behavioural, and physiological symptoms indicating that the individual continues using the substance despite significant substance-related problems. An important characteristic of SUD is an underlying change in brain circuits that may persist beyond detoxification, particularly in individuals with severe disorders. ^[2]

Magnitude of substance use in India, 2019, conducted by the National Drug-Dependent Treatment Centre, All India

*Corresponding Author: Faizee Faizaan

Institute of Medical Sciences (AIIMS), has stated that a substantial number of people use psychoactive substances, and substance use exists in all population groups. ^[3]

Opioid use disorder (OUD) is defined as the chronic use of opioids that causes clinically significant distress or impairment. Symptoms of this disease include an overpowering desire to use opioids, increased opioid tolerance, and withdrawal syndrome when discontinued. ^[4]

Opioid use is reported in 2.1% of India's population, with heroin use being the highest at 1.14% followed by pharmaceutical opioids at 0.96% and opium at 0.52%. ^[3]

It has been suggested that presence of certain specific

personality traits tend to make individuals more predisposed to drug use disorders. Studies have also reported that “sensation seeking and novelty seeking” and “drug seeking and drug experimentation” are associated with similar genetic factors and neural networks. [5]

A hybrid dimensional-categorical model in Section III, Diagnostic and Statistical Manual of Mental Disorders - 5 (DSM – 5), defines personality disorder in terms of impairments in personality functioning and pathological personality traits (i.e., Antagonism, Disinhibition, Negative Affectivity, Psychoticism, and Detachment). Disturbances in self and interpersonal functioning constitute the core of personality psychopathology, and in this alternative diagnostic model they are evaluated on a continuum. Self-functioning involves identity and self-direction; interpersonal functioning involves empathy and intimacy. [2]

A questionnaire was designed as Personality Inventory for DSM-5 (PID-5), to measure personality pathologic traits (American Psychiatric Association, 2013). The questionnaire evaluates 25 primary attributes in five higher order domains. These five domains are: negative affectivity, detachment, antagonism, disinhibition, psychoticism, and also consists of an original form of 220 items and a brief form of 25 items. [6, 7]

Patients with heroin use disorders have more novelty seeking, risk-taking, and impulsivity traits and show significant signs of delinquency before their first experimentation with opioids. A significant proportion of heroin users meet the criteria for antisocial personality disorder (ASPD). [8]

Chronic opioid use can produce several psychiatric symptoms, and opioid-using patients can also have comorbid psychiatric diagnoses that preceded or are clearly independent of opioid use. [8]

Patients with substance abuse or substance dependence diagnoses who have antisocial personality disorder are likely to use more illegal substances; to have more psychopathology; to be less satisfied with their lives; and to be more impulsive, isolated, and depressed than patients with ASPD alone.

The presence and influence of personality traits in substance use has been elaborated in studies throughout the previous decade, however, the focus remained on the established models of personality assessment in western population. In the case of opioid use disorder, the focus remained on the use of the five-factor model of personality.

There remains a paucity of studies using the Alternative DSM-5 Model for Personality Disorders, specially pertaining to opioid use in Indian population. The assessment of personality in the background of various sociodemographic groups can provide a more accurate view of the relationship between personality and opioid use disorders. Therefore, the present study aimed to assess personality in opioid users presenting to tertiary care de-addiction services and to determine which kind of association exists between them.

Materials and Methods

- i). **Study Design:** A cross-sectional observational study was conducted in patients of OUD fulfilling following selection criteria attending tertiary care de-addiction services in teaching institute of a metropolitan city
- ii). **Study Site:** The study was carried out in the IPD (In-Patient Department) and OPD (Out-Patient Department) of tertiary care de-addiction services in teaching institute of a metropolitan city.
- iii). **Selection Criteria:** Patients of OUD attending tertiary

care de-addiction services in teaching institute of a metropolitan city fulfilling the following criteria were included in the study.

Inclusion Criteria

- Patients aged 18 - 60 years
- Patients fulfilling criteria for OUD as per DSM – 5
- Patients admitted to IPD fulfilling OUD as per DSM – 5 criteria not in acute withdrawal
- Patient accompanied by a reliable informant to provide objective data
- Patients willing to give consent to be enrolled in the study
- Patients who understand English, Hindi, or Marathi

Exclusion Criteria

- Patients suffering from acute neurological, medical or surgical ailment
- Patients suffering from any other acute major psychiatric disorder, except for substance use disorder, which may hamper the interview process
- Patients who received Electroconvulsive Therapy within the last 1 month
- Patients fulfilling the criteria for any other concomitant SUD criteria besides tobacco use disorder

1. Sample Size:

$N = 4pq/L$ [2]

In a 2019 study, opioid use was reported in 2.1% of India's population. [3]

$p = 2.1\%$

$q = 1-p = 97.9\%$

$L =$ allowable error

3% Absolute precision

The minimum estimated sample size for 95% confidence level with allowable error of 3% will be = 91 rounded off to 100.

Total sample size taken = 100

2. Methods of Data Collection

With the approval of the ethics committee, well-informed written consent was taken from participants. All participants fulfilling inclusion and exclusion criteria were included in the study.

Details of Scales Used

i). Personality Inventory for DSM-5 Brief Form – Adult (PID5BF)

Personality Factors were assessed with The Personality Inventory for DSM-5 Brief Form – Adult (PID5BF). Krueger *et al* examined its psychometric properties in normal population and in patients, and reported its internal consistency as ranging from 0.73 to 0.95. [9] Reliability was obtained via internal consistency, the Cronbach's alpha coefficient was reported to be ranging from 0.83 to 0.89, and re-test coefficients were 0.77 to 0.87. [10]

Interpretation: Each item on the measure is rated on a 4-point scale (i.e., 0=very false or often false; 1=sometimes or somewhat false; 2=sometimes or somewhat true; 3=very true or often true). The overall measure has a range of scores from 0 to 75, with higher scores indicating greater overall personality dysfunction. [7]

ii). Modified Kuppaswamy Scale

Socioeconomic data was collected using Kuppaswamy scale.

This study used the modified 2022 updated version adjusting for inflation. ^[11]

The total score is calculated by adding the scores of the head of family's educational status, occupational status and overall aggregate income of the whole family according to the categories specified.

Data Management

All the data collected was compiled in an Excel spreadsheet and analyzed. Results were displayed in Tabular and graphical format.

Statistical Methods

The information collected regarding the selected cases was recorded in a Masterchart. Data analysis was done using SPSS (Statistical Package for Social Sciences) version 27.0. Qualitative data was expressed using descriptive statistics. Categorical variables were expressed as frequencies. Descriptive data was calculated as means and standard deviations.

The Chi-square test and ANOVA test was used to make comparisons between groups, Spearman's rho was used to check for the direction of association. A P value < 0.05 was considered significant.

Ethical Considerations

All the patients were selected according to inclusion criteria, they all signed an informed consent form and the proposal of the study was approved by the ethical committee.

Results

This was a single centric, cross-sectional study conducted in the Department of Psychiatry at a tertiary care hospital, after obtaining permission from the Institutional Ethics Committee. At the end of the study, we got the following results which are categorized under the following headings:

Descriptive Data: Table 1

Demographics of Study Population:

- Majority of the population belonged to the age group of 31-45 years (50%). Majority of the subjects interviewed were males (99%) and 1 was female. Majority of the population belonged to Islam (59%), second most frequent population were Hindus (37%), and the smallest group were Christians (4%). The educational status of the study population was as follows, education level below middle school - 12%, studied till middle and High school - 58%, and education level above High school - 30%.
- In the study population, 28% were unemployed. 45% were living with a spouse and 55% were living without a spouse. Majority of the population studied belonged to Upper Lower Socioeconomic Class - 68%.

Clinical Profile of Study Population:

- Comorbid tobacco use was present in 96% of the participants. The most frequently encountered Psychosocial and Environmental problems were Educational problems (54%).
- The most frequent GAF (Global Assessment of Functioning) score in the study population was 81 - 90 (51%).

Correlations

- A significant relationship was found between age and the personality dysfunction domain of Detachment ($p =$

0.02). When comparing the average total score of personality dysfunction across religions, Islam showed a higher likelihood of higher scores ($p = 0.002$) - Table 2.

- The personality domains of Antagonism and Psychoticism showed significant difference of means between personality groups based on Years of education ($p = 0.013, 0.037$). Unemployed individuals were found to have statistically higher levels of Disinhibition ($p = 0.021$) - Table 3.
- A significant relationship was observed between personality groups under the categories of the duration of opioid use, the duration of problematic opioid use, and the personality domain of Antagonism ($p = 0.020, 0.014$). The difference between means of personality groups under the category of age at first problematic opioid use was significantly linked to the personality domain of Disinhibition ($p = 0.011$). Although high Disinhibition was associated with a lower age at first use, according to Chi Square test, this just missed statistical significance ($p = 0.053$) - Table 4.
- The difference of means between the personality groups under the clinical parameter of Number of attempts to quit opioid use, was statistically significant with the Personality domain of Detachment ($p = 0.029$), using ANOVA test. It was found that as the degree of Detachment increased, there was a statistically significant increase in the number of attempts to quit opioid use ($p = 0.026$) using Spearman's correlation coefficient - Table 5.
- Individuals with problems in their primary support group are more likely to exhibit High Negative Affect ($p = 0.021$) and high Disinhibition ($p = 0.007$). Participants with legal problems have poorer control over behavioral inhibition (high Disinhibition) compared to those without legal problems ($p = 0.022$). Individuals with a GAF score of 41-80 showed higher levels of Disinhibition ($p = 0.041$), while those scoring 81-100 had significantly lower Psychoticism levels ($p = 0.03$) - Table 6.

Discussion

This was a single centric, cross-sectional study conducted in the Department of Psychiatry at a tertiary care hospital, after obtaining permission from the Institutional Ethics Committee.

Demographics and Clinical Profile of Study Population

Age

The mean age of participants was 32.77 ± 8.17 years. Most participants (50%) were aged 31-45 years, followed by 18-30 years (42%), with the smallest group being 46-60 years (8%). Similar age distributions were observed in other Indian studies, including Gupta *et al.* where the mean age was 29.9 ± 6.9 years, ^[12] and another comparative study reporting a mean age of 29.83 ± 8.9 years. ^[13]

Education status

Most participants had education up to high school (31%), with only 5% having graduated or studied beyond. These findings align with Chaturvedi *et al.*'s study, which reported that 26.3% of participants had middle school education and only 4.7% had higher education, though the majority in their study were illiterate (53.9%). ^[14]

Occupational Status

In the study population, 28% were unemployed and 72% were employed. This unemployment rate was comparable to Peters

et al.'s study (~30% unemployment) [15] and Chaturvedi *et al.*'s study (49.4% unemployment). [14] Higher unemployment rates may contribute to opioid use disorder development, [16, 17] interrupt treatment access leading to relapse, [18] and create barriers to returning to work due to stigma. [19]

Marital Status

45% of participants lived with a spouse, while 55% lived without. This is similar to Chaturvedi *et al.*'s findings (56.7% married). [14] Higher rates of unmarried status have been associated with increased likelihood of seeking healthcare for opioid use. [20]

Socioeconomic Status

Most participants (68%) belonged to the Upper Lower socioeconomic class, consistent with Kadam *et al.*'s study where Lower SES comprised 83.3%. [21] Lower socioeconomic status has been linked to higher utilization of opioid-related health services. [20]

Substance use Related Pattern of the Study Population

The minimum age at first problematic opioid use was 10 years, with a mean age of 24.17 ± 6.049 years. This aligns with other Indian studies: Chaturvedi *et al.* reported mean initiation age of 23.7 ± 9.3 years. [14] Notably, onset below age 18 is significantly associated with higher likelihood of psychiatric comorbidity compared to onset after age 30. [22] Comorbid tobacco use was present in 96% of participants, similar to Bhat *et al.*'s study (97.3%) [23] and Peters *et al.*'s global study (92%). [15]

Psychosocial and Environmental Problems

Educational problems were most common (54%), consistent with another Indian study reporting 57%. [24] Housing, healthcare access, and legal problems were least frequently encountered.

One-fifth of participants had problems with primary support group, which has been shown to contribute to opioid misuse and overdose risk. [25]

Legal problems and involvement with criminal justice system predispose individuals to OUD and contribute to poor treatment outcomes. [26, 25]

Global Assessment of Functioning

Most participants (51%) scored in the 81-90 range on the GAF. Studies have demonstrated strong correlation between GAF scores and overall quality of life. [27, 28]

Personality Inventory of DSM-5 Brief Form

The highest scores were observed in Disinhibition and Detachment domains. Studies with other substances of abuse show similar patterns, with Disinhibition being a significant predictor of problematic substance use. [29, 30, 31]

Analysis of the Correlation between Personality Profile and Sociodemographic Variables and Substance Profile of the Study Population

Age

Age showed significant correlation with Detachment. This may reflect unresolved developmental conflicts as explained by Erik Erikson's theory. [32] where individuals with substance use disorders may experience isolation, stagnation, and despair as they age.

Religion

Islam was associated with higher average total scores on

personality dysfunction, though this finding should be interpreted cautiously as the hospital's catchment area is predominantly Islamic.

Association of Personality Profile with Education

Psychoticism and Antagonism showed significant correlation with education. Despite literature suggesting Psychoticism is negatively correlated with scholastic achievement, [33, 34] the study found that higher education may increase recognition of behavioral problems and likelihood of seeking care. Antagonism appeared directly proportional to education level, possibly because defiant attitudes become more apparent and problematic as education advances.

Association of Personality Profile with Working Status

Unemployed individuals exhibited statistically higher levels of Disinhibition, consistent with other studies. [35] Disinhibition's facets (impulsivity, disregard for others, distractibility, risk-taking) [36] may lead to frequent job changes, poor leadership skills, [37] and behaviors affecting work performance.

Association of Personality Profile with Duration of Problematic Opioid Use (Years)

Antagonism showed significant positive correlation with duration of problematic opioid use, consistent with literature showing chronic substance use is associated with lower agreeableness. [38] Antagonistic traits may impede relationship formation and treatment-seeking, resulting in longer substance use duration.

Association of Personality Profile with Age at First Consumption of Problematic Opioid Use

Disinhibition was inversely proportional to age at first problematic substance use. This trait manifests as participation in high-risk activities and tends to emerge during adolescence, potentially leading to earlier onset of substance use.

Association of Personality Profile with Number of Attempts to Quit Opioid Use

Detachment showed statistically significant association with number of quit attempts. Individuals with elevated detachment experience social withdrawal and depressive symptoms, [36] potentially impairing functioning and increasing healthcare-seeking behavior, resulting in more quit attempts.

Association of Personality profile with Psychosocial and Environmental Problems – Problems with Primary Support Group

Individuals with primary support group problems scored high on Negative Affect and Disinhibition. These domains are characterized by poor interpersonal relationships, hostility, emotional lability, disregard for others, impulsivity, and irresponsibility, [36] affecting relationships with caregivers.

Association of Personality Profile with Psychosocial and Environmental Problems – Legal Problems

Legal problems were associated with higher Disinhibition. Disinhibition-related behaviors (risk-taking, recklessness, substance abuse) increase likelihood of legal issues. DTC achieves its goal of harm reduction by way of having their participants engaging in negligible illegal activities, through the use of substitution therapies, and robust counseling methods.

Association of Personality Profile with Global Assessment of Functioning

Individuals with GAF scores of 41-80 showed higher levels of Disinhibition, while those scoring 81-100 had significantly lower Psychoticism scores. GAF strongly predicts overall quality of life. [27, 28] Disinhibition impacts work, social interactions, and general functioning, [39] while functional impairment is specifically associated with Psychoticism. [40] Individuals with lower psychopathology tend to perform better in daily tasks.

Limitations

i). **Limited Generalizability:** Hospital-based study with

small sample size collected over one year from a single drug treatment center.

- ii). **Methodological Constraints:** Subject to confounding factors and biases inherent to observational studies.
- iii). **Self-Report Bias:** Assessment relied on self-reported measures which may introduce reporting bias.
- iv). **Cross-Sectional Design:** Single-point assessment prevents establishing cause-effect relationships between substance use and personality factors or evaluating intervention effectiveness over time. A longitudinal design with multiple assessments would provide more meaningful insights.

Table 1: Descriptive Stats

Parameters	Minimum	Maximum	Mean	SD
Age (in years)	18	57	32.77	8.173
Years of education	0	18	8.93	3.663
Duration of problematic opioid use (years)	0	30	7.92	6.831
Age at first consumption of problematic opioid use (years)	10	42	24.17	6.049
Number of attempts to quit opioid use	0	10	2.93	2.021
Number of admissions to quit opioid use	0	9	0.78	1.323
Negative affect	0.0	3.0	1.104	0.7808
Detachment	0.0	2.8	1.132	0.7125
Antagonism	0.0	3.0	0.594	0.6639
Disinhibition	0.0	2.8	1.150	0.8102
Psychoticism	0.0	2.2	0.532	0.5433
Average total score PID5BF	0.12	2.00	0.9012	0.49848

SD: Standard Deviation, PID5BF: Personality Inventory for DSM5 Brief Form

Table 2: Association of Personality profile with Age, Religion

Parameters		Age			Total	P value
		Mean Square	F	Sig.		
Detachment	Between Groups	0.743	1.831		0.020*	
	Within Groups	0.405				
		Religion			Total	P value
		Islam	Hindu	Christian		
Average total score	Low Average total score	28	30	3	61	0.002*‡
		47.50%	81.10%	75.00%		
	High Average total score	31	7	1	39	
		52.50%	18.90%	25.00%		

*Correlation is significant at the 0.05 level, ‡Fisher’s Exact test was used to calculate level of significance (2-tailed)

Table 3: Association of Personality profile with Education, Employment Status

Parameters		Years of Education		Total	P value
		Mean Square	F		
Antagonism	Between Groups	0.835	2.223		0.013*
	Within Groups	0.376			
Psychoticism	Between Groups	0.499	1.906		0.037*
	Within Groups	0.262			
		Employment status		Total	P value
		Unemployed	Employed		
Disinhibition	Low Disinhibition	8 (28.6%)	39 (54.2%)	47	0.021*
	High Disinhibition	20 (71.4%)	33 (45.8%)	53	
Psychoticism	Low Psychoticism	18 (64.3%)	64 (88.9%)	82	0.004*
	High Psychoticism	10 (35.7%)	8 (11.1%)	18	

*Correlation is significant at the 0.05 level

Table 4: Association of Personality profile with Duration of opioid use, problematic opioid use (years), and Age at 1st consumption of problematic opioid use

Parameters		Duration of Opioid Use		F	Sig.
		Mean Square			
Antagonism	Between Groups	0.678		1.879	0.020*
	Within Groups	0.361			
Parameters		Duration of Problematic Opioid Use		F	Sig.
		Mean Square			
Antagonism	Between Groups	0.679		1.933	0.014*
	Within Groups	0.351			
Parameters		Age at 1 st Consumption of Problematic Opioid Use		F	Sig.
		Mean Square			
Disinhibition	Between Groups	1.043		2.01	0.011*
	Within Groups	0.519			
Parameters		Age at First Consumption of Problematic Opioid Use Range		Total	p value
		<= 24 years	> 24 years		
Disinhibition	Low Disinhibition	22	25	47	0.053 [†]
		38.6%	58.1%	47.0%	
	High Disinhibition	35	18	53	
		61.4%	41.9%	53.0%	

*Correlation is significant at the 0.05 level, [†]Correlation just missed statistical significance

Table 5: Association of Personality profile with Attempts to quit opioid use

Parameters		Number of Attempts to Quit Opioid Use		
		Mean Square	F	Sig.
Detachment	Between Groups	1.048	2.278	0.029*
	Within Groups	0.46		
Spearman's rho		Number of Attempts to Quit Opioid Use		
		Correlation Coefficient	0.223*	
	Detachment	Sig. (2-tailed)	0.026*	

*Correlation is significant at the 0.05 level

Table 6: Association of Personality profile with Psychosocial and Environmental Stressors, and Global Assessment of Functioning (GAF)

Parameters		Problems with Primary Support Group		Total	P value
		No	Yes		
Negative affect	Low Negative Affect	47	6	53	0.021*
		58.8%	30.0%		
	High Negative Affect	33	14	47	
		41.3%	70.0%		
Disinhibition	Low Disinhibition	43	4	47	0.007*
		53.8%	20.0%		
	High Disinhibition	37	16	53	
		46.3%	80.0%		
Parameters		Legal Problems		Total	P value
		No	Yes		
Disinhibition	Low Disinhibition	36	11	47	0.022*
		55.4%	31.4%		
	High Disinhibition	29	24	53	
		44.6%	68.6%		
Parameters		Global Assessment of Functioning		Total	p
		41 - 80	81 - 100		
Disinhibition	Low Disinhibition	9 (31.0%)	38 (53.5%)	47	0.041*
	High Disinhibition	20 (69.0%)	33 (46.5%)	53	
Psychoticism	Low Psychoticism	20 (69.0%)	62 (87.3%)	82	0.03*
	High Psychoticism	9 (31.0%)	9 (12.7%)	18	

*Correlation is significant at the 0.05 level

Conclusions

It can be concluded from the present study that sociodemographic variables like education, work, overall functioning, and pattern of substance use is significantly affected by dysfunctional personality domains. Disinhibition and Psychoticism emerged out as the most prominent domains across all types of sociodemographic variables, even when different statistical tests were run.

An individual's sociodemographic background also seems to have an impact on their functioning, and relationships which in turn may further influence their pattern of substance use. An assessment of risk factors which predisposes an individual to substance abuse and dysfunctional personality can contribute to better outcomes in a clinical setting.

Key Clinical Implications

- i). **Age-Targeted Interventions:** Prevention and treatment programs should be customized for young and middle-aged adults, with early intervention strategies for adolescents given the early onset of opioid use.
- ii). **Educational and Vocational Support:** Treatment plans should incorporate academic support, vocational training, and employment assistance to address the prevalent lower educational attainment and high unemployment rates.
- iii). **Tobacco Co-Treatment:** Given the extremely high comorbidity (96%), integrated treatment addressing both opioid and tobacco dependence should be standard practice.
- iv). **Personality:** Informed Assessment and Approaches
- v). **Comprehensive Assessment:** Including personality measures in assessment protocols to better match treatments to individual needs and personality profiles.
- vi). **Extended Follow-up:** Tailored relapse prevention strategies and long-term monitoring based on personality risk factors.

References

1. Sadock BJ, Sadock VA. *Kaplan & Sadock's Synopsis of Psychiatry*. 12th ed. Boland RJ, Verduin ML, editors. Philadelphia: Wolters Kluwer; 2022.
2. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 5th ed. American Psychiatric Publishing; 2013.
3. Ambekar A, Agrawal A, Rao R, Mishra A, Khandelwal S, Chadda R. *Magnitude of Substance Use in India 2019*. New Delhi: Ministry of Social Justice and Empowerment, Government of India; 2019.
4. Dydyk A, Jain N, Gupta M. Opioid Use Disorder. *StatPearls Publishing*; 2024.
5. Norbury A, Husain M. Sensation-seeking: Dopaminergic modulation and risk for psychopathology. *Behav Brain Res*. 2015 Jul;288:79–93.
6. American Psychiatric Association. *APA DSM5 The Personality-Inventory-For-DSM-5-Full-Version-Adult*. 2013.
7. American Psychiatric Association. *APA DSM5 The Personality-Inventory-For-DSM-5-Brief-Form-Adult*. 2013.
8. Sadock BJ, Sadock VA. *Kaplan & Sadock's Synopsis of Psychiatry Behavioral Sciences/Clinical Psychiatry*. 11th ed. Pataki CS, Sussman N, editors. Philadelphia: Wolters Kluwer; 2015.
9. Krueger R, Derringer J, Markon K, Watson D, Skodol A. Initial construction of a maladaptive personality trait model and inventory for DSM-5 – ERRATUM. *Psychol*

- Med*. 2012 Sep 24;42(9):1891–1891.
10. Abdi R, GhR C. A preliminary study of adaptation and psychometric properties of the short form adult version of the Diagnostic and Statistical Manual of Mental Disorders Personality Inventory fifth edition DSM-5 (PID-5-BF). *Mod Psychol Res*. 2017.
11. Kumar G, Dash P, Patnaik J, Pany G. *Socioeconomic Status Scale-Modified Kuppaswamy Scale for the Year 2022*. *Int J Community Dent*. 2022 Jun 10.
12. Kedia Gupta S, Ambekar A, Dhawan A, Mehta M. Personality profile of alcohol and injecting opioid users: A comparative study from India. *Asian J Psychiatr*. 2017 Feb;25:142–6.
13. Nevid JS, Gordon AJ, Barris A, Sperber JE, Haggerty G. Personality profiles of patients with alcohol use disorder and opioid use disorder in an inpatient treatment setting. *J Substance Abuse Treat*. 2019 Feb 1;97:91-6.
14. Chaturvedi HK, Mahanta J, Bajpai RC, Pandey A. Correlates of opium use: retrospective analysis of a survey of tribal communities in Arunachal Pradesh, India. *BMC Public Health*. 2013 Dec 10;13(1):325.
15. Peters L, Soyka M. Interrelationship of Opioid Dependence, Impaired Impulse Control, and Depressive Symptoms: An Open-Label Cross-Sectional Study of Patients in Maintenance Therapy. *Neuropsychobiology*. 2019;77(2):73–82.
16. Swart ECS, Newman TV, Huang Y, Howell RJ, Han M, Good CB, *et al*. Patient and medication-related factors associated with opioid use disorder after inpatient opioid administration. *J Hosp Med*. 2022 May 16;17(5):342–9.
17. Kendler KS, Lönn SL, Ektor-Andersen J, Sundquist J, Sundquist K. Risk factors for the development of opioid use disorder after first opioid prescription: a Swedish national study. *Psychol Med*. 2023 Oct 23;53(13):6223–31.
18. Hallgren KA, Ries RK, Atkins DC, Bumgardner K, Roy-Byrne P. Prediction of Suicide Ideation and Attempt Among Substance-Using Patients in Primary Care. *J Am Board Fam Med*. 2017 Mar;30(2):150–60.
19. Mumba MN. Employment implications of nurses going through peer assistance programs for substance use disorders. *Arch Psychiatr Nurs*. 2018 Aug;32(4):561–7.
20. Rhee TG, Rosenheck RA. Use of Drug Treatment Services Among Adults With Opioid Use Disorder: Rates, Patterns, and Correlates. *Psychiatr Serv*. 2019 Nov 1;70(11):992–9.
21. Kadam M, Sinha A, Nimkar S, Matcheswalla Y, De Sousa A. A Comparative Study of Factors Associated with Relapse in Alcohol Dependence and Opioid Dependence. *Indian J Psychol Med*. 2017 Sep 1;39(5):627–33.
22. Naji L, Dennis BB, Bawor M, Varenbut M, Daiter J, Plater C, *et al*. The association between age of onset of opioid use and comorbidity among opioid dependent patients receiving methadone maintenance therapy. *Addict Sci Clin Pract*. 2017 Dec 28;12(1):9.
23. Bhat B, Dar S, Hussain A. Sociodemographic profile, pattern of opioid use, and clinical profile in patients with opioid use disorders attending the de-addiction center of a tertiary care hospital in North India. *Indian J Soc Psychiatry*. 2019;35(3):173.
24. Farooqui AM, Arya A, Singh A, Dalal PK. Psychiatric Comorbidity, Psychosocial Problems, and Functioning of People Who Inject Opioids: An Observational Study. *Addict Health*. 2022 Jul 29;14(3):218–23.

25. Brady BR, Taj EA, Cameron E, Yoder AM, De La Rosa JS. A Diagram of the Social-Ecological Conditions of Opioid Misuse and Overdose. *Int J Environ Res Public Health*. 2023 Oct 20;20(20):6950.
26. Arsene C, Na L, Patel P, Vaidya V, Williamson AA, Singh S. The importance of social risk factors for patients diagnosed with opioid use disorder. *J Am Pharm Assoc*. 2023 May;63(3):925–32.
27. Nevarez-Flores AG, Sanderson K, Breslin M, Carr VJ, Morgan VA, Neil AL. Systematic review of global functioning and quality of life in people with psychotic disorders. *Epidemiol Psychiatr Sci*. 2019 Feb 1;28(1):31–44.
28. Strada L, Schmidt CS, Rosenkranz M, Verthein U, Scherbaum N, Reimer J, *et al*. Factors associated with health-related quality of life in a large national sample of patients receiving opioid substitution treatment in Germany: A cross-sectional study. *Subst Abuse Treat Prev Policy*. 2019 Dec 3;14(1):2.
29. Seyed Hashemi SG, Merghati Khoei E, Hosseinnzhad S, Mousavi M, Dadashzadeh S, Mostafaloo T, *et al*. Personality traits and substance use disorders: Comparative study with drug user and non-drug user population. *Pers Individ Dif*. 2019 Oct;148:50–6.
30. Creswell KG, Bachrach RL, Wright AGC, Pinto A, Ansell E. Predicting problematic alcohol use with the DSM–5 alternative model of personality pathology. *Personal Disord*. 2016;7(1):103–11.
31. Heath LM, Drvaric L, Hendershot CS, Quilty LC, Bagby RM. Normative and Maladaptive Personality Trait Models of Mood, Psychotic, and Substance Use Disorders. *J Psychopathol Behav Assess*. 2018 Dec 13;40(4):606–13.
32. Orenstein GA, Lewis L. Eriksons Stages of Psychosocial Development. *StatPearls*; 2022.
33. Flores-Mendoza C, Widaman K, Mansur-Alves M, Bacelar TD, Saldanha R. Psychoticism and Disruptive Behavior can be also Good Predictors of School Achievement. *Span J Psychol*. 2013 Jun 7;16:E13.
34. Heaven PCL, Ciarrochi J, Vialle W. Conscientiousness and Eysenckian psychoticism as predictors of school grades: A one-year longitudinal study. *Pers Individ Dif*. 2007 Feb;42(3):535–46.
35. Funayama M, Nakagawa Y, Nakajima A, Kawashima H, Matsukawa I, Takata T, *et al*. Apathy Level, Disinhibition, and Psychiatric Conditions Are Related to the Employment Status of People With Traumatic Brain Injury. *Am J Occup Ther*. 2022 Mar 1;76(2).
36. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders (5th Edition Text Revision)*. 5th ed. Washington, DC: American Psychiatric Association; 2022.
37. Sutton A, Roche M, Stapleton M, Roemer A. Can Psychopathy Be Adaptive at Work? Development and Application of a Work Focused Self- and Other-Report Measure of the Triarchic Psychopathy Model. *Int J Environ Res Public Health*. 2020 Jun 2;17(11):3938.
38. Fridberg DJ, Vollmer JM, O'Donnell BF, Skosnik PD. Cannabis users differ from non-users on measures of personality and schizotypy. *Psychiatry Res*. 2011 Mar;186(1):46–52.
39. Ro E, Vittengl JR, Jarrett RB, Clark LA. Disinhibition domain and facets uniquely predict changes in depressive symptoms and psychosocial functioning. *Personal Ment Health*. 2023 Nov 10;17(4):363–76.
40. Bach B, Skjernov M, Simonsen E. Personality Pathology and Functional Impairment in Patients With Hypochondriasis. *J Acad Consult Liaison Psychiatry*. 2023 Jan;64(1):28–34.